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Nota di contenuto	Introduction -- Towards Spectrum Sharing in Virtualized Networks -- Cloud-based Context-Aware Spectrum Availability Monitoring and Prediction using Crowd-Sensing -- Cooperative Spectrum Handovers in Cognitive Radio Networks -- Network Coding based Broadcasting schemes for Cognitive Radio Networks -- Cooperative and Cognitive Hybrid Satellite-Terrestrial Networks -- Health monitoring using wearable technologies and cognitive radio for IoT -- Millimeter-Waves -- Spectrum Sensing in Cognitive Radio Networks under Security threats and Hybrid Spectrum Access -- OPTIMUM SPECTRUM SENSING APPROACHES IN COGNITIVE NETWORKS -- Learning strategies in

Cognitive Radio involving soft computing techniques -- Learning strategies in Cognitive Radio involving soft computing techniques -- Conclusion.

Sommario/riassunto

This book provides an overview of the latest research and development of new technologies for cognitive radio, mobile communications, and wireless networks. The contributors discuss the research and requirement analysis and initial standardization work towards 5G cellular systems and the capacity problems it presents. They show how cognitive radio, with the capability to flexibly adapt its parameters, has been proposed as the enabling technology for unlicensed secondary users to dynamically access the licensed spectrum owned by legacy primary users on a negotiated or an opportunistic basis. They go on to show how cognitive radio is now perceived in a much broader paradigm that will contribute to solve the resource allocation problem that 5G requirements raise. The chapters represent hand-selected expanded papers from EAI sponsored and hosted conferences such as the 12th EAI International Conference on Mobile and Ubiquitous Systems, the 11th EAI International Conference on Heterogeneous Networking for Quality, Reliability, Security and Robustness, the 10th International Conference on Cognitive Radio Oriented Wireless Networks, the 8th International Conference on Mobile Multimedia Communications, and the EAI International Conference on Software Defined Wireless Networks and Cognitive Technologies for IoT.